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Saving in the National Economy

From the National Income Perspective

THE Office of Business Economics has received frequent requests for further explanation of the data relating to personal saving which are presented in the national income tables, and of their relationship to saving and investment as a whole. This article is designed to meet this expressed need and to point out some of the facts which these data reveal.

For proper understanding it is first necessary to discuss the meaning and measurement of total saving or investment as well as of saving in the parts of the economy, and to show how personal saving fits into this aggregate. This is done in the first section of the article; consideration of the actual data, except in an illustrative way, is confined to the later sections.

In the second major part of the article the distribution of saving and investment among the principal parts of the economy over the past quarter century and changes in the amount of total saving are examined, and their relation to business fluctuations and expansion are discussed. In the final section the personal saving data are analyzed separately with regard both to their composition and their relationship to consumer markets.

Saving and investment

In national income and product statistics the total saving of the Nation in any period is the value of additions to the Nation's capital stock. It is thus consistent with the simple fact that whatever is produced in a period and is not consumed is left over (saved) and added to the capital stock. For the economy as a whole, saving and additions to the capital stock (investment) are identical.

The capital stock implied by the measures of saving and investment in the Office of Business Economics data consists of humanly produced durable capital goods owned by private business firms and other private organizations, of privately owned housing (inclusive of owner-occupied dwellings) and of business inventories. It also includes the monetary gold stock and net claims of United States residents on foreign countries, since these provide the ability to secure goods and services from foreign countries in the future.

However, it does not include governmentally owned structures, roads, equipment and inventories, or consumer goods (other than houses) owned by individuals. In a word, in the measurement of saving and investment all goods purchased by governmental units and (except for houses and business property) by individuals are treated as though they were consumed as soon as acquired.

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A principal reason for restricting the definition of saving and investment in this way is the absence of information on actual consumption by, and additions to the capital stock of, Governments and individuals. However, since the motivations and consequences of business investment differ significantly from those of capital formation by Governments and individuals, the measures of investment and saving presented in the income and product statistics are highly useful for economic analysis.

Saving and investment different processes

Although saving and investment for the economy as a whole are identical for any past period, the processes of saving and of investment are quite separate. Saving arises from the receipt of current income in excess of current expenditures. Investment, as used here, consists of purchasing or constructing buildings, machinery, houses, or other durable capital assets, of adding to the inventory holdings of a business, or of investing abroad.

The motives leading an individual or a firm to save are in general quite different from those leading to investment even though the desire to acquire assets included in the capital stock may be one motive among several for saving. For any single individual or firm, and indeed for any group smaller than all the economic units within the economy, saving need not be numerically equal to investment as defined, nor is it likely to be. Governmental units by definition do not invest in real assets included in the capital stock, but they do save or dissave by operating with a surplus or deficit. Hence it is quite possible, and indeed necessary, to study saving patterns, behavior and motivations in the economy separately from those for investment.

It should also be understood that not even for the economy as a whole need all the plans of potential investors to invest in a future period and all of the plans of potential savers to save in the same future period be equal. When they are not, unplanned saving and investment take place (the latter most strikingly in the form of unplanned changes in inventories); and actual investment or saving, while equal to one another, may differ substantially from the amounts planned or expected at the beginning of the period by the individuals, firms, and governmental units of the country. The process by which divergent saving and investment plans are reconciled ordinarily involves changes in aggregate output, income, and business sales. Plans of the economic units of the country for the division of their incomes between spending and saving, and with respect to the amount of their investment, are principal forces governing economic fluctuations and economic growth.

It should be stressed that statistics for past periods can measure only actual saving and investment; to measure saving and investment plans or intentions requires a different kind of information. Nevertheless, much can often be inferred with respect to saving and investment plans from the historical behavior of saving and investment when these are studied in conjunction with changes in production, income and prices.

I

The Meaning of saving Data

In 1953 the value of additions to the capital stock, as defined, amounted to $49.5 billion on a gross basis—that is to say, this is the amount of actual investment, making no deduction for the using up of fixed capital assets. This figure is the sum of the gross private domestic investment and net foreign investment components of the gross national product.

The NATIONAL INCOME supplement provides a broad breakdown of the corresponding gross saving of the economy, which may be summarized as follows (in billions of dollars): [1]

Capital consumption allowances	27.2
Undistributed corporate earnings	7.9
Personal saving	20.0
Government surplus or deficit (−) on income and product transactions	−6.6
Statistical discrepancy	1.0
Total gross saving	**49.5**

The "statistical discrepancy" line denotes only that there is a numerical difference of $1 billion between gross saving or investment arrived at as the sum of investment items and as the sum of the components of saving. Since the source of the discrepancy is not known, it is equally appropriate to add it to saving, as is done here, or to subtract it from investment, which would yield a total of $48.5 billion.

Difficulty of measuring net investment

Deduction from gross investment or saving of capital consumption allowances on fixed business property and housing—consisting of depreciation charges, accidental damage (from fire, storm, etc.) to fixed assets included in the capital stock, and capital outlays charged by business to current expense—would yield an implied estimate of $22.3 billion as the net investment or saving of the United States economy in 1953. However, in presenting the national income and product statistics the Office of Business Economics does not feature or even compute such a measure of net capital formation or saving for the country as a whole because "book" depreciation charges are not considered a satisfactory measure of the current value of capital consumption.

There are two main reasons for this. First, book depreciation on durable capital assets is valued in terms of prices at the time the assets were built or acquired rather than of prices in the period to which the depreciation estimates pertain, and hence is not comparable to the valuation of gross new investment in the same period.[2] Second, book depreciation is conventionally distributed over the life of depreciable assets in accordance with the straight-line formula or, occasionally, some other formula, because information required to establish the actual timing of capital consumption is lacking. Only sketchy information is available concerning even the actual life spans of capital goods within which their total cost is to be written off.

These points are discussed in the article, "Growth of Business Capital Equipment, 1929–53," in last month's SURVEY. That source also provides, for producers' durable goods, adjustment factors to derive an alternative series of depreciation estimates based on reproduction costs. But, as is there pointed out, that type of measure too has important limitations for the measurement of net capital formation, if what is desired is a measure of the increase in the ability of the stock of durable capital goods to contribute to future production. The price indexes utilized to adjust the valuation of depreciation are subject to the very important limitation that they cannot take adequate account of quality improvement; and, in addition, the timing problems remain.

Saving by major groups

In accordance with business practice, the depreciation figures utilized by business are, nevertheless, accepted in the national income statistics in reporting the income of corporate and noncorporate business firms. In addition, a depreciation estimate for individually owned housing and other property is computed by a comparable procedure in order to derive estimates of the rental income of persons. As a result, since the saving of any group within the economy can be computed by deducting from income its current expenditures together with other current charges, a breakdown of the implied net saving figure among the major groups in the economy emerges from the statistics, as shown in the table just presented.

This does not, obviously, mean that net saving figures for the economy are more meaningful from the standpoint of measuring changes in its production potential than would be similar estimates for net investment, since they are the same thing. However, the division based upon accounting records of gross income between capital consumption allowances and net income, and of gross saving between capital consumption allowances and net saving, is of interest from another standpoint—that of analyzing the sources of investment funds. To the extent that business decisions are based upon profits computed by use of book depreciation, such data are also relevant to consideration of business decisions with respect to investment, dividend, and other policies, as well as to tax determinations.

For many purposes gross saving estimates may be preferred, however, even though gross saving and investment are themselves not without a range of ambiguity since the dividing

1. The reader will find it convenient to have at hand for reference the 1954 NATIONAL INCOME supplement to the SURVEY OF CURRENT BUSINESS. That source also affords precise definitions of individual series for saving, investment, and related items. The saving data cited above are summarized from Table 5 of the supplement. "Undistributed corporate earnings," in this and all other tabulations and references in this article, include the corporate inventory valuation adjustment, and also the minor item (negative in 1953) "excess of wage accruals over disbursements."

2. An exception may be noted for farm depreciation, which is valued in terms of current prices.

line between new fixed capital investment, on the one hand, and current expenditures for maintenance and repair, on the other, is not a precise one.

Data which permit gross saving, too, to be broken down among corporations, governmental units, and persons and noncorporate business combined are available. The resulting data for 1953 are as follows (in billions of dollars):

Sector	Gross saving	Capital consumption allowances	Net saving
Corporations	21.7	13.8	7.9
Persons and noncorporate business	33.4	13.4	20.0
Government	−6.6	.....	−6.6
Statistical discrepancy	1.0	.....	1.0
Total	49.5	27.2	22.3

Derivation of this breakdown requires that capital consumption allowances be added back to the net saving figures for the two private groups. Capital consumption allowances on property owned by persons and noncorporate business can be obtained from the NATIONAL INCOME supplement; subtraction of this item from total capital consumption allowances provides an estimate for corporations.[3] No entry for Government property is required since such property is not counted in gross capital formation.

Total saving and personal saving

In an ultimate sense, of course, all saving may be viewed as being made by or in behalf of individuals and for their benefit, and in this sense individual saving can be considered to be the same as the saving of the economy as a whole. However, the considerations determining the volume of saving or dissaving by Governments or corporations in any time period may differ sufficiently from those controlling the saving of individuals, as well as from one another, to make a breakdown necessary for analysis of factors which determine the amount of saving. The breakdown has also a great influence on changes in the amount and type of personal assets and liabilities, as well as those of corporations and Government.

It will be noted that whereas the term "personal saving" was used in the previous table, in which personal saving was confined to net saving, the transition to a gross saving basis, which involves adding back depreciation on noncorporate business property as well as on individually owned housing, makes it necessary to refer to "persons and noncorporate business."

Actually, both the gross and net saving estimates comprise all private noncorporate saving. However, in the national income statistics the net income of unincorporated business enterprises is considered to be received directly by their owners, and is therefore included in personal income. This means that, formally, unincorporated enterprises as such can have no net saving—just as corporate saving would be zero if the dividend payments of corporations were always equal to their net earnings. Hence, all net saving by proprietors of unincorporated firms is personal saving.

It has sometimes been suggested that the saving of proprietors of unincorporated business should be divided between "personal" and "business" saving. Actually there is available no suitable alternative to the convention followed, since most proprietors of unincorporated businesses do not distinguish between their saving in a business and personal capacity nor have they occasion to do so.[4] Depreciation charges, on the other hand, ordinarily are computed by noncorporate firms, and national income statistics recognize them as a business deduction in the computation of net income.

Measurement of saving by groups

While the definition of the total saving of the economy is established by the definition of the capital stock, the division of saving shown in the table requires certain additional decisions. To make clear their character and importance requires a brief statement of the ways in which saving is or can be derived for the parts of the economy.

In the national income data, the saving of each of the domestic sectors is equal to its current income less current expenditures which are treated as consumption (i. e., personal consumption expenditures and Government purchases of goods and services) and less its transfers of income to other sectors. This is so with respect both to the definition of saving and its statistical measurement.

The reason that the total of saving obtained in this way must equal total investment requires explanation, and the following perhaps most closely follows the definition just given. Explanation is facilitated if the term "transfers" is construed broadly for a moment, and thought of as consisting of two types.

The first type—the only one relevant to the preceding definition—consists of transfers of the income of one sector of the economy to another sector. This group comprises personal tax and nontax payments to Government, corporate profits tax liability, transfer payments and interest paid by Government, Government subsidies to business (less the current surplus of Government enterprises), and corporate dividend payments. These payments necessarily appear both as income to the recipient and as a transfer from the income of the payer. Hence, in a sense they introduce duplication of income if the incomes of the three sectors are added up, but—inasmuch as transfers of income are deducted in arriving at the saving of the payer—they do not affect the total of saving if the saving of the three groups, derived by the method stated above, is combined.

The second group of transactions which may perhaps be thought of as "transfers" includes indirect business tax and nontax liability, contributions for social insurance, and business transfer payments to the personal sector (such as corporate gifts to nonprofit organizations). These must be distinguished from the first type because they are deducted before the income of the payer is computed, and hence their inclusion in the income of the recipient does not introduce duplication in the combined income of the three parts of the economy—nor, of course, in the saving total. Since they do not involve payments from the income, as measured, of any group, they are not relevant to the definition provided above.

The key fact in the explanation sought for the identity of aggregate saving and investment is this. If the incomes of persons, corporations, and Government are added, and the transfers of income from one sector to another—the first type of transfer—are deducted as is done in the derivation of saving, the result is identical with the net national product

3. Noncorporate capital consumption is the sum of the "depreciation" lines (18, 24, and 31) in table 6 of the *Supplement*. Total capital consumption allowances are shown in table 4. The procedure described, utilized to avoid going beyond data presented in the *Supplement*, assumes that capital outlays charged to current expense, which are not shown in table 6, are wholly corporate, although a rough estimate suggests they may actually be about three-fourths corporate. The error involved with respect to the broader totals used in this article is minor. Accidental damage to noncorporate business property is included with depreciation in table 4.

4. Such a distinction is somewhat more meaningful for partnerships, particularly the larger firms, since there is a group decision as to the amount of the firm's income which is to be retained in the business and the amount to be distributed to partners. This may be distinguished from the decisions of the partners as individuals with respect to the amounts of their income which they will spend and save. There is a similar difference between the power of control over individual and partnership assets. However, data indicating the amount of partnership income actually distributed to firm members are not available.

except, as discussed earlier, for the statistical discrepancy. This is shown for 1953 by the following table. (The minor item, "excess of wage accruals over disbursements," must be included in the income total since it in effect involves, when positive, income which is omitted from both the income of the employer and personal income. In 1953 it was negative so that, actually, removal of a slight duplication is involved.) Data are shown here in millions of dollars in order to facilitate direct comparison with the statistics as reported in the NATIONAL INCOME supplement.

Total (duplicated) income of the sectors		**420,356**
Personal income	286,066	
Corporate profits and inventory valuation adjustment	38,466	
Government receipts	95,900	
Excess of wage accruals over disbursements	−76	
Less: Transfers from income between sectors		**83,772**
Personal tax and nontax payments	35,987	
Corporate profits tax liability	21,144	
Government transfer payments	12,785	
Net interest paid by Government	5,040	
Subsidies minus current surplus of Government enterprises	−529	
Dividends	9,365	
Plus: Statistical discrepancy in national accounts		**1,047**
Equals: Net national product		**337,631**

The net national product represents the sum of expenditures treated as consumption and of (net) investment, while the total income of the sectors less their transfers of income is the sum of expenditures treated as consumption and of (net) saving. Hence it is apparent from the identity of net national product and total income less transfers that the procedure followed to derive saving in each sector must yield a saving total which is identical with that for investment.

The foregoing discussion has been, for convenience, in terms of net saving and investment but it is apparent that the measurement of income, saving, and investment before deduction of capital consumption allowances would lead to the same conclusion with respect to the identity of the measures of gross saving and investment.

Measurement from assets and liabilities

Saving in each group might also be measured in another way, which it is useful to spell out since it further explains the meaning of the data. This would be to sum the values of (1) additions to the real domestic assets owned by the sector which are included in the capital stock; (2) increases in debts due from the other sectors (including cash and deposits, considered in this formulation as debts of Government or the banks) less increases in debt to the other sectors; (3) transfers of equity funds to other sectors less transfers of equity funds from other sectors; and (4) purchases of land and used durable capital assets from other sectors less sales of such assets to other sectors (in order to offset changes in financial assets and liabilities arising from such transactions).

This method is presently followed in the national income statistics only to derive an alternative estimate of personal saving (which is discussed later) but it is hoped that a comprehensive set of estimates of this type can be developed in the future.

It is clear that, if this method is to give the correct saving total for the economy as a whole as previously established by the definition of changes in the capital stock, components (2), (3), and (4) must wholly cancel out among the sectors with the sole exception that changes in the monetary gold stock, the increase in net claims on foreign countries, and the net outflow of equity capital abroad, will be left over. In other words, the sum of item 1 for all the sectors must equal domestic capital formation and the sum of items 2, 3, and 4 for all the sectors must equal net foreign investment.

Timing problems

If the sum of the saving estimates for each of the three groups in the economy, measured as income less consumption and transfers of income to other groups, is to equal the total saving of the economy as established by the definition of additions to the capital stock, it is necessary that every current transaction be entered on the same date as a receipt for the recipient and an expenditure by the payer. Similarly, if the asset-liability approach is followed, it is obvious that every loan transaction must appear as a debt on the books of the borrower and an asset on the books of the creditor on the same date, and that the timing of transfers of equity funds must be similarly consistent on the books of both parties to the transaction. Finally, if the same saving total is to be derived for each of the sectors by this method as by the income-expenditures method, the timing of these changes in assets and liabilities must be consistent with the timing of related income and expenditure transactions.

Actual accounts kept do not always coincide in these ways, and when they do not they must be made consistent in the national income statistics. Obviously, there is a choice as to which records to adjust, and the choice made affects the saving estimate in a given period for each sector involved—although not, of course, for the economy as a whole.

The corporate income tax is an important example of such inconsistency in reporting as between payer and recipient. In computing their net income after tax for a year, corporations ordinarily deduct their liability for corporate income tax on that year's earnings, whereas the Federal budget shows as a receipt actual tax collections, based on prior year earnings, which may be quite different. The Office of Business Economics, in compiling the series for Government receipts which enter into the derivation of the "surplus on income and product account", substitutes for tax collections the tax liability as carried in the corporate accounts.

If saving estimates were derived by the alternative method of computing changes in assets and liabilities, it would be necessary, in order to arrive at the corporate and Government saving totals provided in the national income statistics, to consider a change in the value of such taxes accrued but unpaid as a change in the debt of corporations to Government.[5]

If the alternative of making the corporate accounts consistent with those of Governments by counting such taxes on a payments basis were followed, corporate saving and the Government deficit would each be nearly $1 billion smaller in 1953. In many years the difference would be in the opposite direction.

A similar adjustment of reported Government receipts is required for indirect business taxes and payroll taxes, which are also treated on an accrual basis. In addition, because business firms act as an intermediary in the collection of withholding taxes, there is a lag ranging up to several months (and varying from time to time) between the date such taxes are actually paid by the employee and that on which they are received by governmental units. This lag also requires

[5] This is done for corporations in Office of Business Economics data on "Sources and Uses of Corporate Funds". The line "Federal income tax liabilities" in the table on page 5 of SURVEY OF CURRENT BUSINESS, September 1954, provides such data for nonfinancial corporations for the years 1946 to 1953.

adjustment of Government receipts to achieve consistency with the accounts for the individual tax payer.[6]

A somewhat different example concerns credit sales. These are considered to involve a receipt to the seller and an expenditure by the buyer at the time the sale is made, not at the time payment is made. If, as has sometimes been suggested, the alternative procedure of counting actual outlays by the purchaser rather than purchases were to be followed, personal saving in 1953 would be nearly $3 billion larger and corporate saving nearly $3 billion smaller with respect to consumer goods (other than houses) purchased from corporations, alone.[7]

Table 1.—Illustrative Table of the Balance of Saving and Investment in 1953

(Billions of dollars)

	Gross investment	Capital consumption allowances	Net investment	Gross saving	Capital consumption allowances	Net saving	Saving less investment
Corporations	27.1	13.8	13.3	21.7	13.8	7.9	−5.4
Persons and noncorporate business	24.3	13.4	10.9	33.4	13.4	20.0	9.1
Government	-----	-----	-----	−6.6	-----	−6.6	−6.6
Rest of the world	−1.9	-----	−1.9	-----	-----	-----	1.9
Statistical discrepancy	-----	-----	-----	1.0	-----	1.0	1.0
Total for the economy	49.5	27.2	22.3	49.5	27.2	22.3	0

Source: U. S. Department of Commerce, Office of Business Economics.

As these examples may suggest, the approach in determining the timing to be followed in recording current transactions involving business enterprises has generally been to accept business practice, and to construct accounts in which transactions of business with governments and individuals conform to that practice.

Classification of borderline cases

The division of saving among corporations, Government, and persons and noncorporate business also requires decisions as to where certain borderline cases are to be classified. Thus the current surplus of governmentally-operated social insurance funds is counted as Government saving, although it is sometimes suggested that it be counted as personal saving. These funds receive employer and/or employee contributions together with income from investments and disburse mainly old age, survivors, sickness, death, and unemployment benefits to covered persons and their beneficiaries. The alternative of classifying the surplus of their receipts over their expenditures as personal saving would raise personal saving and lower Government saving (increase the deficit of Governments) by $3.5 billion in 1953. Table 10 of the NATIONAL INCOME supplement provides data which permit this adjustment to be made for other years if desired. The surplus of Government enterprises is also included with Government (rather than corporate) saving.

Corporate saving covers all private corporations organized for profit. Thus this group encompasses family-controlled firms for which the division between saving by the firm and saving by the family may be little more meaningful than in the case of proprietorships, since the same individual is making the saving and spending decisions for both, and he may be able fairly readily to transfer assets between corporation and family holdings. On the other hand, saving by organizations not organized for profit, including mutual financial institutions, is included with personal rather than corporate saving, even though in certain decisions controlling saving—such as that of a saving and loan association to add to its reserves rather than increase its dividend rate—the ability of the individual shareholder to influence the decision may be no greater than that of the individual small stockholder to influence the dividend policy of a large corporation. Such borderline cases, which are present in any classification, should be kept in mind in interpreting the saving data for the separate groups.

Investment by sectors

The national income tables permit a breakdown of investment which parallels that for saving. The NATIONAL INCOME supplement furnishes an estimate of gross domestic investment by persons and noncorporate business in buildings, equipment, and business inventories.[8] Deduction of this amount from total gross domestic investment yields an estimate of gross domestic investment by corporations. Capital consumption allowances required to move to a "net" investment figure are the same as in the case of saving although, for the reasons stated earlier, such a computed bookkeeping "net investment" figure is of little use in analysis. It is shown in the present context only in order to indicate definitional relationships.

Since domestic investment in the national income statistics is confined to private capital formation, there is no investment entry for Government. The remaining investment entry, net foreign investment, measures the net change, arising from current international transactions, in the international assets and liabilities held by the Nation as a whole. Net foreign investment is not allocated among the domestic sectors but is classified as investment in the "Rest of the World."

The resulting investment figures are shown in the first three columns of table 1, and aligned with those already derived for saving.

Sector differences in saving and investment

Estimates of this type permit a comparison of the saving and investment, as defined, done by each of the major segments of the economy.

It is immediately apparent from the table that while saving and investment are identical for the economy as a whole this is not the case for the separate groups within the economy—just as it obviously is not for a single individual, firm, or governmental unit. The difference between saving and investment is shown for each group in the last column of the table. These differences are, of course, the same on either a gross or a net basis. For the economy as a whole they necessarily balance out to zero, provided the statistical discrepancy in the national accounts is included.

Effect of investment definition upon the data

The difference between saving and investment in each sector as shown in the final column of table 1 represents changes in its financial assets and liabilities (plus net acquisitions of

6 Personal income taxes are dated in the national accounts at the time they are paid by individuals (or withheld from their earnings)—not, like corporate taxes, on the basis of liability computed against current income.

7 See line 13, "Increase in debt not elsewhere classified", measuring changes in consumer debts to corporate business, in table 6 of the NATIONAL INCOME supplement.

8. The estimate is the sum of lines 15, 16, 20, 21, 26, 27, and 28 in table 6.

land)—that is to say, it is equivalent to the sum of components (2) through (4) of saving in the alternative saving definition provided above. Consequently, while affected by decisions adopted with respect to the classification of the economy and the timing of transactions, these data are not dependent upon any particular definition of domestic capital formation; they would not be affected by broadening or narrowing the scope of the items included in the capital stock, nor by changes in the method of valuing capital consumption or the change in business inventories, so long as changes were consistently adopted throughout the national income statistics.[9] Such differences in procedure would either affect gross saving and gross investment equally, or else would involve a different division of gross saving and investment between capital consumption allowances and net saving and investment.

As previously noted, however, these decisions do affect the gross and net saving and investment figures in the table. The most important points which should be kept in mind in their interpretation are probably the exclusion of government property and consumer durable goods, and the use of book depreciation. Inclusion of government and consumer durable assets would raise gross saving and investment in the Government and noncorporate sectors, and also net saving and investment so long as the stock of such assets is being increased. The use of book depreciation, generally based on historical cost (and the straight line method) tends throughout the postwar period to yield higher figures for net saving and investment in the corporate and personal sectors than would the use of replacement cost.

9. The valuation of the change in business inventories in the national income statistics is discussed in the NATIONAL INCOME supplement and in James P. Daly, "LIFO Inventories and National Income Accounting," SURVEY OF CURRENT BUSINESS, May 1953.

II

The Pattern of Saving in the Past Quarter Century

A convenient framework to place in perspective investment and the saving which financed it is afforded by table 2, provided the characteristics of the data which have just been discussed are kept in mind. In order to focus upon typical patterns rather than those of a single year, data have been cumulated for the prewar period covered by the estimates, for the war years, and for the post-World War II years as well as for the entire 25-year period.

Aside from the time periods, the table is similar to table 1 except for two modifications. First, figures for net investment, which were included in table 1 only for illustration, have been omitted. Second, the Government surplus or deficit has been divided between the surplus of social insurance funds and the surplus or deficit of governments arising from other government operations, since this division is of some interest. A further division between Federal and other government operations is provided in the NATIONAL INCOME supplement and will be referred to in the text.

Postwar saving and investment

The distribution of saving and investment among the parts of the economy during the postwar period may be considered first. In this period corporations accounted for slightly more than half of the gross investment, two-fifths of gross saving, half the total of capital consumption allowances, and one-third of net saving.

Persons and noncorporate business accounted for not far from half of total gross investment. Their gross and net saving and capital consumption allowances each represented slightly over half of the corresponding totals for the economy as a whole.

The government surplus on income and product account represented 8 percent of the gross saving and 14 percent of the net saving of the economy in this period. Foreign investment comprised 4 percent of total gross investment and, of course, a somewhat larger proportion of net investment.

One of the more interesting features of table 2 is the extent to which gross saving approached a balance with gross investment within each of the two private domestic sectors. Thus, on a consolidated basis, gross corporate investment in construction, equipment, and inventories was financed to the extent of almost 78 percent from internal sources—43 percent by capital consumption allowances and 35 percent by undistributed corporate earnings. Only 22 percent required drawing upon the saving of other sectors; this amount is equivalent, in the usual sources and uses of funds statement, to the excess of funds obtained from external sources over other uses of funds (increases in financial assets and land acquisition).[10]

Gross investment in the plant, equipment, and inventories of farm and nonfarm business, in houses, and in construction by nonprofit organizations absorbed 87 percent of the gross saving by persons and unincorporated business. Only 13 percent of gross saving (or about one-fifth of net saving) represented the excess of additions to the financial assets of persons and noncorporate business over additions to their liabilities to the other sectors of the economy.

It will be understood, of course, that these statements apply only to each sector as a whole on a consolidated basis. The individuals or firms contributing the saving were not necessarily the same as those making the investment. A particular corporation (or individual) can tap saving by another corporation (or individual) only by borrowing or the transfer of equity funds, so that from its standpoint such saving is just as much an external source as saving by a different sector.

For corporations, however, the correspondence between saver and investor was probably sufficient for the availability of funds from internal sources, as such, to have had some effect upon the amount of corporate investment and, conversely, for the size of corporate requirements for investment funds to have influenced the amount of dividend payments, and hence of corporate saving. Among individuals, however, there probably was relatively little correspondence between savers and investors even for the period as a whole, and even less for shorter periods. Hence, there can have been but little direct causal relationship between the amounts of noncorporate investment and of noncorporate saving.

10. Data for corporations shown in table 2 differ from corresponding data shown in the "Sources and Uses of Corporate Funds" table on page 5 of the September 1954 SURVEY in several respects, of which the more important are (1) inventories and undistributed profits include the inventory valuation adjustment; (2) gross investment and capital consumption allowances include capital outlays charged to current expense; (3) banks and insurance companies are included; and (4) fixed investment estimates were derived, by the procedure described earlier, as an allocation of total fixed investment measured in the gross national product, instead of by an allocation to corporations of a portion of the plant and equipment expenditures reported in the OBE-SEC surveys.

The net flows of funds among the parts of the economy are also of interest. In the 8 years of the postwar period investment by corporations in plant, equipment, and inventories exceeded their saving by $41 billion. Net investment abroad amounted to $12 billion. Corresponding to this

Table 2.—Saving and Investment by Sectors

[Billions of dollars]

	Gross investment	Gross saving	Capital consumption allowances	Net saving	Saving less investment
	1929–41				
Corporations	57	46	54	−8	−12
Persons and noncorporate business	54	86	49	37	33
Government		−20		−20	−20
Social insurance funds		9		9	9
Other		−29		−29	−29
Rest of the world	7				−7
Statistical discrepancy		6		6	6
Total for the economy	**118**	**118**	**102**	**15**	**0**
	1942–45				
Corporations	17	42	25	18	25
Persons and noncorporate business	16	147	21	126	131
Government		−167		−167	−167
Social insurance funds		16		16	16
Other		−183		−183	−183
Rest of the world	−6				6
Statistical discrepancy		5		5	5
Total for the economy	**27**	**27**	**46**	**−19**	**0**
	1946–52				
Corporations	181	140	73	68	−41
Persons and noncorporate business	159	182	80	102	23
Government		27		27	27
Social insurance funds		26		26	26
Other		0		0	0
Rest of the world	12				−12
Statistical discrepancy		3		3	3
Total for the economy	**353**	**353**	**157**	**195**	**0**
	1929–53				
Corporations	250	223	156	72	−27
Persons and noncorporate business	229	415	149	266	187
Government		−160		−160	−160
Social insurance funds		51		51	51
Other		−212		−212	−212
Rest of the world	13				−13
Statistical discrepancy		14		14	14
Total for the economy	**498**	**498**	**305**	**192**	**0**

NOTE.—Estimates of noncorporate investment and depreciation for 1929–32, not shown in the NATIONAL INCOME supplement, were prepared by methods similar to those followed in later years, in order to complete this table.

Source: U. S. Department of Commerce, Office of Business Economics.

$53 billion was an excess of saving over investment elsewhere in the economy. This was provided (aside from the $3 billion unaccounted for as a result of the statistical discrepancy) to the extent of $23 billion by persons and noncorporate business and some $27 billion by Government. The latter amount was almost wholly in the form of social insurance fund surpluses, as the receipts and expenditures on income and product account of governments were otherwise in balance for the period as a whole. Almost the entire surplus occurred in the Federal component.[11]

Insofar as the private domestic groups are concerned, the pattern is fairly typical—investment by corporations as a whole normally exceeds their saving while an excess of saving over investment is usual in the noncorporate sector, although there have been exceptions to both. The position of governments, on the other hand, has varied widely and frequently between a surplus and deficit position, and net foreign investment has also fluctuated frequently between positive and negative amounts.

Prewar and wartime patterns

The postwar pattern may be compared with those before and during World War II. The major characteristics of the 1929–41 period were the low volume of investment associated with the depression of the thirties, and the presence of substantial Government deficits incurred as a result of reduced tax yields and the effort to stimulate economic activity by Government expenditures. Capital consumption allowances almost matched gross investment in both the corporate and noncorporate areas. The total net saving of the economy, as measured, was small; in 6 of the 13 years it was actually negative. Net personal saving, itself small, served in large part to offset dissaving by Government and corporations rather than to finance investment in excess of capital consumption allowances.

The war period pattern was strikingly different from the peacetime periods, and makes especially clear the sharp distinction between personal saving and the total saving of the economy.

With the heavy demands placed upon available resources by the war, little was available for private investment. Output of consumer goods could not advance to keep pace with the sharp rise in consumer income caused by war production, and price increases were restrained by controls.

Despite sharp advances in taxes, the combined Government deficit on income and product account amounted in 4 years to $167 billion. For the Federal Government alone it came to $177 billion, but State and local governments, with their financial position influenced contrarywise by the same forces as the private economy, had a $10 billion surplus.

Under these circumstances, gross investment fell below capital consumption allowances, and the net saving of the economy as a whole was negative.[12] Private net saving, however, was enormous, coming to $126 billion for persons and $18 billion for corporations. With capital consumption allowances exceeding gross investment, the excess of their saving over their investment was in each case still larger. In addition net foreign investment turned negative as foreign countries, owing to the relative scarcity of goods available for commercial import from the United States, built up their dollar balances.

The mechanisms by which private saving was made available to finance the Federal deficit were diverse. Federal bonds were sold directly to individuals and nonfinancial corporations. Private debts to financial institutions were paid off and replaced by Government loans. The proceeds of bank loans to the Government, based on credit expansion, when spent added to the liquid asset holdings of individuals and businesses.

11. The "cash" surplus of the Federal Government over this period was much smaller than the surplus on income and product account chiefly because (1) there was a large increase in outstanding Government loans (other than non-recourse loans to farmers) to private business individuals, foreign countries and international organizations, which is treated as an expenditure in the "cash" budget; and (2) corporate liability for taxes on 1953 income, payable in 1954, greatly exceeded liability for taxes on 1945 income, payable in 1946.

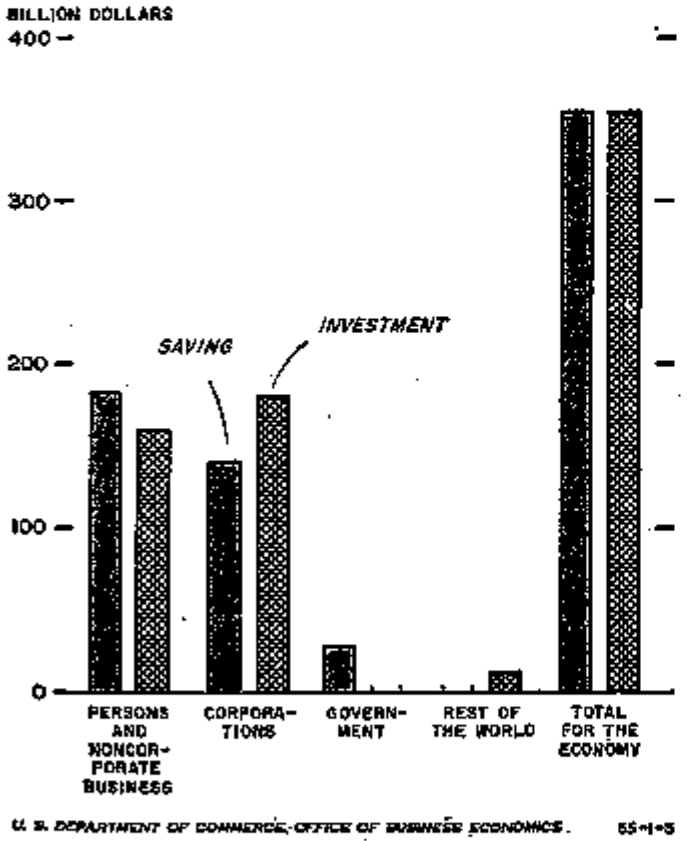
12. A qualification should be noted here, though the subject will not be discussed. Actually, a large volume of investment was made by the Federal Government during the war in productive facilities of a character normally financed by private means. Some of these were later transferred to private ownership and used in private production.

The effect of this wartime experience upon the structure of asset holdings and claims in the economy was enormous, and in some respects brought about the largest changes that occurred during the past quarter century. This will be illustrated for the personal sector by a table to be presented later; at this point in the discussion, a comparison of the data in table 2 for the 4 years of World War II with the totals for the entire 25-year period is instructive.

Of the 25-year total of personal saving, 46 percent came during the 4 war years. Of the excess of saving over investment in the personal and noncorporate area—representing additions to financial assets in excess of additions to debt to the other sectors—the war years were responsible for fully 70 percent.

For corporations, the war years contributed 25 percent of the net saving for the entire period. They canceled almost half of the excess of investment over saving accruing in the other 21 years of the period—with a corresponding impact upon corporate financial assets and debt.

Gross Saving and Investment in the Postwar Period, 1946-53



U. S. DEPARTMENT OF COMMERCE, OFFICE OF BUSINESS ECONOMICS. 55-1-5

The $167 billion Government deficit on income and product account for the war years compares with $160 billion for the period as a whole.

Relation of saving and investment to GNP

Studies by private investigators, particularly Simon Kuznets and Raymond Goldsmith, have indicated that, aside from cyclical fluctuations and war periods, total investment and saving have comprised a rather stable proportion of gross national product over a long period of time.[13] Cyclically, the ratio of total investment and saving to gross national product has risen in prosperous years and declined in recession years, since investment has fluctuated much more widely than consumption. Indeed, it is well accepted that the changing intensity of investment demand—war periods aside—has in the past been a prime cause of such variations in the dollar value of the gross national product.

Over most of the period covered by these investigations the scope of Government operations in the economy, and in particular the size of the combined Government surplus or deficit, were small except in wartime. Hence earlier experience was consistent with stable relationships between gross national product and both (1) total gross saving or investment and (2) gross private saving (the sum of gross saving by corporations and by persons and noncorporate business). Gross private saving, it is important to note, is equal to gross investment plus a Government deficit on income or product account, or minus a Government surplus.

In the more recent period, with the enlarged scope of Government activity, wide fluctuations in Government spending in response to changing defense and other requirements, and heavy reliance upon sensitive Government revenue sources, Government surpluses and deficits have frequently been large and have fluctuated widely from year to year. Under these conditions the movement of total gross investment or saving has no longer corresponded closely to that of gross private saving, and it is of interest to examine the relationship of each to changes in the value of total production.

On the accompanying chart the solid line shows the ratio of gross private saving to gross national product from 1929 through 1953 and the dotted line the ratio of gross saving to gross national product. The difference between the two is the ratio of the Government surplus or deficit (and the statistical discrepancy) to gross national product.

Examination of the gross private saving ratio shows, aside from sharp movements during World War II and its immediate aftermath, that it (1) closely followed business fluctuations during the decade of the thirties, falling when the gross national product was reduced and rising as activity increased; and (2) most interestingly, was highly stable during the period of sustained postwar prosperity from 1948 through 1953 at a rate about the same as in 1929, or about 15 percent of gross national product. The downward movement in the very moderate recession of 1949 was small and preliminary data suggest that any change in 1954 was also slight.

In general, the series corresponds well to the expectation derived from longer-run experience of stability of the ratio as among prosperous years, and of positive association with cyclical changes in gross national product.[14] This means, of

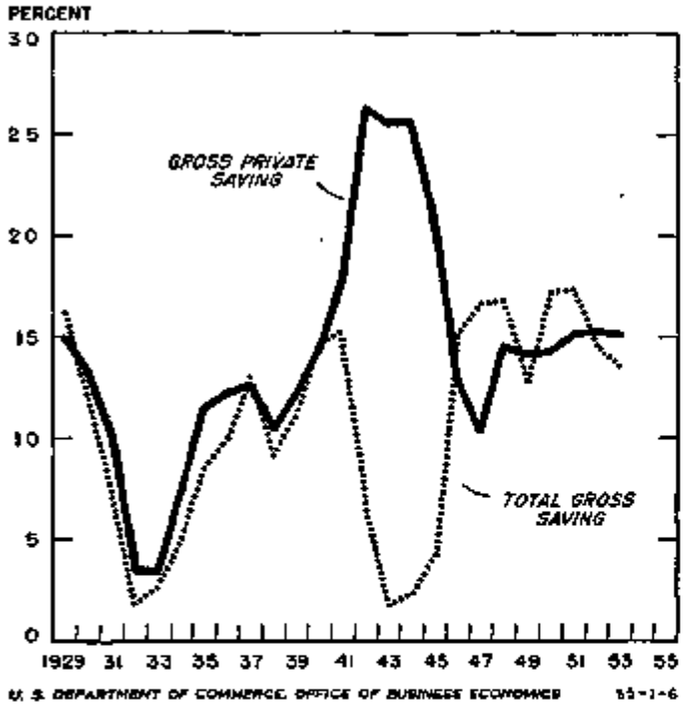
13. These studies have covered periods dating back almost to the Civil War. They have been based on definitions which are not identical with those followed here, and some series have suggested a downward movement of the saving ratio toward the end of the nineteenth century. The statement in the text is intended as a broad generalization based upon their findings; the original studies should be consulted for detail. Convenient summaries by the authors are presented in Simon Kuznets, "Proportion of Capital Formation to National Product," *American Economic Review*, Vol. XLII, No. 2 (May 1952), pp. 507-526; and Raymond Goldsmith, "Trends and Structural Changes in Savings in the Twentieth Century," in *Savings in the Modern Economy*, University of Minnesota Press, 1953, pp. 133-152.

14. If the ratio of private saving to gross national product is related to an index of the cyclical position of the economy (such as the proportion of the labor force employed), it will be found that the saving ratio is higher in the later years of the prewar period than in "corresponding" years of the early thirties. It appears that a satisfactory mathematical expression of the relationship between the two would require a formula, rather similar to the "ratchet" functions developed by Franco Modigliani, which in periods of substantial underutilization of resources would take account of the ratio of current-year GNP to the peak of GNP in the last prosperous period rather than to the current full-employment level only.

course, that as between two prosperous years, gross private saving and gross national product have tended to change in the same proportion, whereas during major cyclical movements, percentage changes in gross private saving have been much larger than those in gross national product.

The ratio of total gross saving (or gross investment) to gross national product also followed the business cycle closely in the prewar years, although the exact pattern was somewhat

Gross Private Saving and Total Gross Saving as a Percentage of Gross National Product



different, and the average ratio for the postwar period was not very different from that in the last predepression year of 1929. Within the postwar period, however, swings in the ratio, not associated with cyclical changes, were rather wide, including a reduction from 17.4 percent in 1951 to 13.6 percent in 1953 (a difference equivalent to $14 billion of gross investment at the 1953 level of gross national product).

It is not surprising that in this period the ratio is more stable when the Government surplus is added to investment. This fact is consistent with the common observation that to a degree an increase in a Government deficit on income and product account, or a reduction in a surplus, exerts an expansionary influence upon the dollar value of gross national product somewhat similar in character to that of an increase in investment, since both add to private income—without, in general, adding correspondingly to the supply of goods and services available for private consumption.

There is, of course, no implication from the stability of the private saving (or investment-plus-Government-deficit) ratio that the full effects upon the size of gross national product of a dollar of gross investment and a dollar of Government deficit are similar. Analysis required to measure the impact of different expenditures upon the economy is beyond the scope of the present discussion. It may be pointed out, however, that even apart from the important and obvious influence of investment upon future productivity, any stronger tendency for investment to stimulate further investment would tend to appear as an increase in both gross national product and private saving rather than as an increase in the ratio shown on the chart.

Interaction of investment and activity

A close relationship between investment-plus-Government-deficit and gross national product does not, of course, indicate that the causation is in one direction. In actual fact it is quite clear that there is considerable interaction, in which the amount of investment and the size of the Government surplus or deficit are major determinants of the value of the gross national product, but are also themselves greatly influenced by market prospects, which are related to the size of consumption and total gross national product.

Moreover, even if it were to be supposed, for example, that private investment plans and Government plans to spend and raise revenue (i. e., for the size of the Government surplus or deficit) were wholly independent of the size of the gross national product, actual investment and the actual Government surplus or deficit would frequently be affected by changes in the size of the gross national product in at least four important ways. These include (1) unplanned inventory accumulation or liquidation; (2) the effect of income changes upon tax revenues; (3) the effect of income and inventory changes upon imports (and, indirectly upon exports), which affects net foreign investment; and (4) price changes.

Broad stability of total saving relationship

This by no means suggests that the relationship is not meaningful, however. For there is considerable reason to believe that, while investment decisions and decisions with respect to Government expenditures and revenues are strongly influenced and at times dominated by the current size of gross national product and the current strength of markets generally, longer term and other considerations are such that they do have a substantial element of independence of the immediate business position.

If this is so, it implies that the stability of the relationship noted between gross saving and gross national product rests mainly upon saving habits—that is to say, that decisions of persons and business firms with respect to the amount they save rather than use for current expenditures are primarily dependent upon the value of gross national product (i. e., of the gross income, before all taxes, earned in current production) or upon other determinants which move in close association with the gross national product, rather than upon independent influences.[15] The nature of this relationship, to repeat, is that persons and firms as a whole have saved a rather constant proportion of gross national product in prosperous years and a progressively lower percentage in poorer years.

It should be clearly understood that there is nothing inherent in the system of national accounts that automatically ensures this relationship, as is illustrated by the fact that it has not held during periods when unusual influences were dominant. During World War II individuals and firms sharply raised their rate of saving—partly, at least, under the necessity imposed by shortages of goods available for purchase by consumers, accompanied by rationing and price controls—and in 1946 and 1947, with backlog demands strong and liquid asset holdings large, they cut saving below the usual rate. In the quarters of late 1950

15. This need be true, of course, only in a net sense—that is, other factors could powerfully influence the saving of particular firms or individuals if their influence were offsetting among the individual units and thus did not affect total private saving.

Table 3.—Gross Private Saving Components as Percentages of Gross National Product in Seven Prosperous Years, and Analysis of Ratios for Major Components

		1929	1948	1949	1950	1951	1952	1953	7-year average	Mean deviation from 7-year average	
										In percentage points	In percent
		A. Percent of Gross National Product									
1	**Gross private saving**	15.0	14.5	14.1	14.3	15.1	15.2	15.1	14.8	0.4	2.8
2	Gross personal and noncorporate saving	7.9	7.1	6.6	8.0	9.0	9.0	9.2	8.1	0.8	10.0
3	Personal saving	4.0	3.9	2.9	4.2	5.4	5.3	5.5	4.5	0.8	17.9
4	Capital consumption allowances	3.9	3.2	3.7	3.7	3.6	3.7	3.7	3.6	0.1	3.3
5	Gross corporate saving	7.2	7.4	7.4	6.3	6.1	6.2	6.0	6.7	0.6	8.6
6	Net saving	2.8	4.2	4.0	2.8	2.6	2.6	2.2	3.0	0.6	20.2
7	Capital consumption allowances	4.4	3.2	3.5	3.5	3.5	3.6	3.8	3.6	0.3	7.1
		B. Analysis of Gross Saving Percentages for Major Components									
8	**Gross personal and noncorporate saving as a percent of GNP (line 2, or 9 x 10)**	7.9	7.1	6.6	8.0	9.0	9.0	9.2	8.1	0.8	10.0
9	Gross disposable personal income [1] as a percent of GNP	83.5	76.2	76.3	76.0	72.5	72.1	72.2	75.6	2.9	3.8
10	Gross personal and noncorporate saving as a percent of gross disposable personal income	9.4	9.4	8.6	10.5	12.4	12.5	12.7	10.8	1.5	13.9
11	**Gross corporate saving as a percent of GNP (line 5, or 12 x 13)**	7.2	7.4	7.4	6.3	6.1	6.2	6.0	6.7	0.6	8.6
12	Gross corporate income after tax [2] as a percent of GNP	12.7	10.2	10.3	9.6	8.9	8.9	8.5	9.9	1.0	10.5
13	Gross corporate saving as a percent of gross corporate income after tax	56.3	72.4	72.0	66.2	68.8	70.3	69.9	68.0	3.8	5.7

1. Disposable personal income plus noncorporate capital consumption allowances.
2. Corporate profits and inventory valuation adjustment plus corporate capital consumption allowances (and the negligible item "excess of wage accruals over disbursements") less corporate profits tax liability.

NOTE.—Detail may not add (or multiply) to totals or period-averages because of rounding.

Source: U. S. Department of Commerce, Office of Business Economics.

and early 1951 the saving rate again fluctuated widely as spending jumped and fell in accordance with fears of future shortages and price advances—although the quarterly fluctuations were ironed out enough to prevent the period from appearing very exceptional on the basis of annual data.

The considerable stability evidenced by the saving pattern in ordinary times is not, indeed, easy to explain. The difficulty is pointed up by table 3. This table is confined to 1929 and 1948–53, covering only prosperous peacetime years in which the ratio of gross private saving to gross national product did not vary a great deal.

This considerable stability did not result from a corresponding stability in the components of private saving. Instead, as the upper portion of the table shows, there was much greater variation in the ratio of both gross corporate saving and gross personal saving to gross national product but the variations were generally in opposite directions and offsetting. For example, gross personal saving comprised an appreciably higher proportion of gross national product from 1951 to 1953 than in the earlier years, but the corporate saving ratio was lower.

The last column of the table makes the point rather clearly. If one estimated total gross private saving in each of the 7 years by applying its average percentage (14.8) to gross national product, the estimates would differ from the actual figures by an average of less than 3 percent. But if he followed the same procedure for gross corporate saving alone he would be off, on the average, by about 8½ percent and for gross personal saving by 10 percent.

Moreover, the ratio of gross saving in each sector to the gross income after tax in the same sector, out of which saving is made, is not consistently more stable than its ratio to total gross national product. In the case of corporate saving, it is true, application of the average ratio to corporate gross income, rather than gross national product, would cut the average error of estimate from 8½ to 5⅝ percent, despite the fact that 1929 appears quite different from the postwar years. But for gross personal saving the use of an average ratio to gross personal income rather than gross national product would raise the average error from 10 to 14 percent.

In terms of its composition, therefore, the stability of the overall private saving rate in prosperous years gives the appearance of resulting in considerable part from a complex of offsetting changes in the ratios of gross corporate and of gross personal income to gross national product and in the rates of corporate and personal saving out of gross income in the two sectors.

Summary

It is not the purpose of the present article to attempt to carry the analysis beyond this stage. Results so far may be summarized as follows.

Observations over a long period of years, dating back to the last century, suggest that, aside from periods affected by major war controls or scares, the ratio of gross private saving to gross national product has been rather stable in

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prosperous years; and there has also been a close cyclical relationship between the two. Changes in the rate of national output have appeared to stem predominantly from changes in investment demand, so far as the private economy is concerned, and from changes in the relation between Government receipts and expenditures, with the private saving rate playing a more passive role. Experience up to the present time has continued to be consistent with this relationship.

While the foregoing is true, it likewise appears that in the past quarter century, and especially the postwar years, the period for which statistics are most adequate and which is also the most relevant for consideration of future probabilities the constancy of the saving rate in prosperous peacetime years was, if not fortuitous, the result of complex economic interrelationships which have yet to be described. Under this circumstance less confidence can be placed in its continuance than would be the case if it could be simply and convincingly explained.

There is also a possible corollary of the fact that the total saving rate has shown more stability than have the saving rates for the corporate and personal sectors separately (whether or not net saving is distinguished from capital consumption allowances). It suggests that it will be difficult to establish statistical expressions of the relationships between variables governing changes in the separate components of saving, and then cumulate them to explain aggregate saving, in a way which will more satisfactorily describe changes in total private saving than can be done by dealing with total private saving directly.

III

Personal Saving

Previous discussion has stressed that personal saving is only a part, and a highly variable part, of total saving. In this section attention is directed in more detail to personal saving as such.

The probable accuracy of the data may be considered first. In the national income statistics personal saving is obtained by deducting personal consumption expenditures from disposable personal income. Hence it picks up any errors in the income and expenditures estimates to the extent they are not compensating. For this reason a fairly liberal allowance for error in the relatively small residual estimate of saving would be required if there were no checks on the estimate. But this is not the case.

The national income statistics also provide a second estimate which is largely independent of, and can be compared with, the first. This is secured by deducting saving by corporations and Government from total investment. This personal saving estimate also picks up any errors in the aggregates from which it is derived as a residual, but such errors are almost wholly distinct from those entering into the first estimate.

Still a third estimate of personal saving can be obtained by adding the value of changes in the assets of the noncorporate private economy and deducting changes in its liabilities to others. For most items, the statistical procedure is to determine the value of the asset or liability at the beginning and end of the period for the economy as a whole, deduct the amounts pertaining to corporations, Government, and foreigners, and take the change in the remainder as the addition to the asset or liability of the noncorporate private group. For holdings of "real" assets and corporate securities the change during the period is estimated directly, rather than as the difference between values at the beginning and ending of the period.

This saving estimate, which is prepared by the Securities and Exchange Commission, is largely independent of the other two. It is detailed, and compared with the others, in table 6 of the 1954 NATIONAL INCOME supplement.

Agreement of independent estimates

The accompanying chart shows the three estimates with the area they span shaded. (For 1929–32 the third estimate is not available so only two are shown.) With respect to the general level of personal saving and important changes in its amount over time, the three largely independent estimates serve strongly to corroborate one another and lend confidence in the accuracy of the findings.

If the "true" saving figure is thought of as probably lying within or close to the shaded area, the range covered by that area is not so broad as to raise doubts about the major swings in saving; on the contrary, these stand out clearly. The chart also makes clear, however, the inadvisability of stressing small changes in the amount of saving. From 1951 to 1952, for example, one series increases slightly, one decreases slightly, and one is virtually unchanged. All agree, however, that saving was about the same in the two years, and this is all that is analytically significant.

A qualification to the independence of the three saving estimates should be noted with respect to the depreciation of noncorporate property. Depreciation figures enter into the derivation of all three estimates in much (though not quite) the same form. In addition, for farm and residential properties the figures are not based upon individual records but are instead computed estimates for such properties as a whole. The gross noncorporate saving estimates shown in the tables should probably be viewed as somewhat more reliable than those for net personal saving.

It should also be noted that the quarterly figures and the preliminary annual estimates based on the quarterly data which appear in the February issues of the SURVEY are appreciably less reliable than the regular annual series.

Components of saving

In addition to providing an independent estimate of total personal saving, the Securities and Exchange Commission data provide an interesting breakdown of changes in the assets and liabilities of the private noncorporate group. These may be assembled in various ways.

In table 4 they are so organized as to detail the summary data shown in table 2 for saving and investment in the personal and noncorporate business sphere. Gross and net investment in real assets counted in the capital stock are distinguished from the change in net claims on and net transfers of equity funds to others, which is shown in table 2 as the excess of saving over investment. The "errors and omissions" line in table 4 (which represents the statistical difference between saving estimated as income-less-consumption and saving estimated from changes in assets and liabilities) has been placed as it has solely to facilitate the comparison of table 4 with table 2. It has no implication with respect to the superiority of one series over the other, or the probable source of differences between the two.

Meaning of the detail

The simplest way to derive an estimate of personal saving by the assets and liabilities approach would be to sum (in addition to direct investment within the noncorporate area) changes in the debt of the rest of the economy to the private noncorporate sector, deduct the changes in the debt of the private noncorporate sector to the rest of the economy, and add the net flow of equity funds from the private noncorporate segment to the other sectors.[16] All changes in debt or flows of equity funds both parties to which are within the private noncorporate sphere would be omitted, since they cancel out. The detail shown for changes in assets and liabilities would then be on a correspondingly consolidated basis.

For the most part, this is what has actually been done. However, in order to make the detail of the estimates shown in the lower half of table 4 correspond somewhat more closely to changes in assets and liabilities as seen from the viewpoint of individuals, modifications of the procedure have been introduced in the case of a few financial intermediaries.

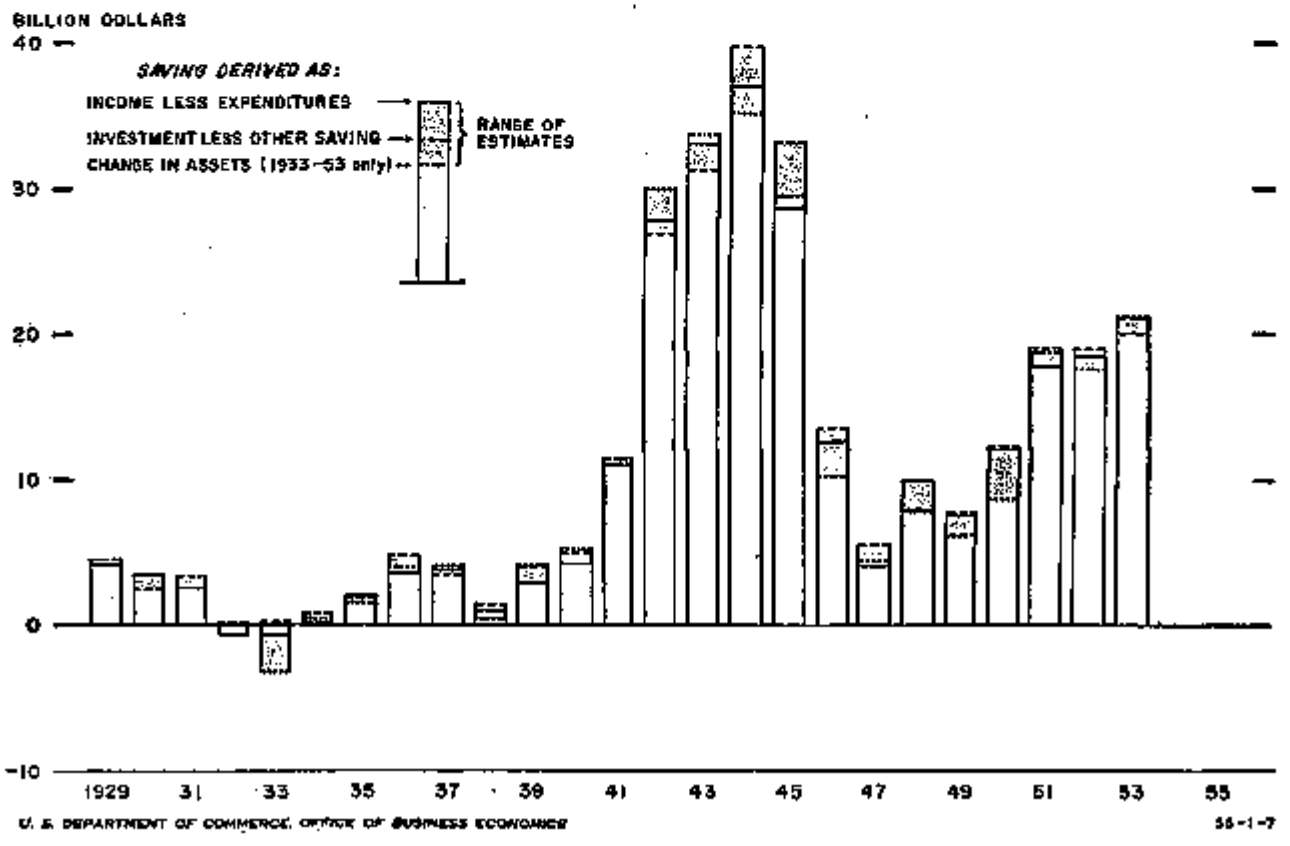
Thus, mutual life insurance companies (including fraternal life insurance associations) have been separated from the rest of the sector. The increase in their assets (exclusive of loans to policyholders) less the increase in their obligations (other than to policyholders) has been computed and is shown, together with similar data for stock life insurance companies, in line 21, to represent personal saving in the form of private life insurance. As a result, the cash and deposits and security holdings of life insurance companies are omitted from lines 19–20 and lines 22–23 of table 4, and any debt of insurance companies is omitted from line 24. Also, changes in the debt of individuals and other noncorporate entities to life insurance companies (other than loans to policyholders) do not consolidate out but instead are included in line 24 and the supporting detail.

Mutual savings banks and saving and loan associations are rather similarly treated. Changes in deposits or shareholdings in these associations are counted, as such, as changes in personal assets (in lines 19 and 20). The assets and debt of these associations are omitted from lines 18

16. As noted in part I, transfers of land and used durable capital assets should also be counted in principle. Statistically, account has been taken in table 4 only of transfers of farm property (line 3) and in line 4 (nonfarm dwellings) where it has been handled as an adjustment to new purchases. The farm item has been grouped in the tables with new investment, rather than broken out separately, because of its small size and the absence of similar data for other types of property.

Transfers of equity funds cannot be distinguished statistically from loan funds in the data given in table 4, principally because net acquisitions of corporate and foreign securities in line 23 do not distinguish stocks from bonds, and also because of the treatment afforded life insurance companies and certain other financial intermediaries, as detailed in the following paragraphs.

ESTIMATES OF PERSONAL SAVING



and 24 and their components, while changes in the debt of individuals to the associations are included in line 24 and its components.[17]

These modifications are important in moving table 4 toward a breakdown which would represent changes in assets and liabilities as seen from the standpoint of individuals (including proprietors of unincorporated businesses) but it should be recognized that the breakdown retains a decidedly heterogeneous character. The "currency and bank deposits" and securities lines in particular include changes in the holdings not only of individuals and unincorporated business firms but also of private pension funds (other than those handled by life insurance companies), health and welfare funds, estates and private trusts, and nonprofit organizations. The latter lend themselves to treatment similar to that now afforded life insurance companies, if problems of data availability can be surmounted. Private pension plans, whose assets are believed to be growing currently by something in the order of $2 billion a year, are perhaps the most important among them.

It should also be recognized that, except for the financial intermediaries given special treatment, consolidation causes to disappear from table 4 loans in which both the borrower and lender fall within the private noncorporate sector. This applies particularly to consumer debt to noncorporate business; individually held residential and farm mortgages; and individuals' loans to noncorporate firms. Data permitting, these could, alternatively, be shown both as changes in assets under line 18 and as changes in debt under line 24, in order to bring the breakdown closer to the classification as viewed by individuals.

Neither of these alternatives would change the estimate of personal saving, or its broad breakdown between investment within the personal sector, on the one hand, and "additions to financial assets less debt," on the other.

Changes in assets and liabilities

The first 4 columns of table 4 provide detailed data on the composition of personal saving for the time periods given in table 2. The principal comments suggested by these data were made in connection with the earlier table. However, the detailed information illuminates the fact that the rather small value of postwar additions to net financial assets—$15 billion by direct estimate or $22 billion by the residual approach, as compared with over $130 billion during the war years—was the result of a continued very substantial addition to financial assets, amounting to $104 billion, which was largely matched by an $89 billion growth in debt to corporations and financial intermediaries.

Most of this debt arose in the process of acquiring real assets, particularly houses; the form in which personal saving components are grouped in table 6 of the NATIONAL INCOME supplement serves to stress this fact. In that source increases in residential mortgage debt are offset against net investment in houses, and increases in farm and nonfarm business debt are offset against net investment in the real assets of these enterprises, in order to obtain a rough partial measure of the increase in the equity of individuals in houses and noncorporate business properties arising from current transactions.[18] By this classification, the breakdown of the $102 billion personal saving total for the 1946–53 period appears as follows:

	Billions of dollars	
Increase in equity in residences and unincorporated business property		11
Personal saving in other forms		84
Additions to financial assets	104	
Less: Increase in consumer debt to corporations, etc.	20	
Errors and omissions		8
Total		102

The increase in consumer debt also arose mainly in the process of acquiring goods, but it cannot be similarly offset against the value of purchases since consumer goods other than houses are not included in investment, or in personal saving.

Since personal saving excludes all types of capital gains and losses, the increase in equity in real property shown above represents simply purchases of new assets less depreciation and increases in debt; consequently, it does not measure the enormous increase in the market value of the stock of houses and noncorporate business property which has resulted from the inflation of prices since 1945. The growth in debt, on the other hand, has been swollen by the financing of resales of existing properties (including land) at the higher price levels, with the corresponding increase in mortgage values.

A recent article[19] in the SURVEY pointed out that rough estimates indicated "that in early 1953 the equity in mortgaged homes amounted to about 55 percent of the market value of the residences—about the same proportion as in 1950, slightly higher than the similar ratio in 1940, and again about equal to the proportion in the twenties." The proportion of owner-occupied homes that were mortgaged at that time—45 percent—was stated to be "no higher than prewar and probably not greatly different from that of the late twenties."

Value of financial asset holdings

Not only the market value of real property but also that of individuals' holdings of corporate securities has been greatly affected by price changes. Indeed, changes in the value of such security holdings have resulted to a much greater extent from fluctuations in the securities markets than from the net flow of equity funds from individuals to corporations.

While precise data are not available, the Securities and Exchange Commission reports that rough estimates indicate the value of such securities at the end of 1953 was of the order of magnitude of $200 billion. During 1954 the value of stocks listed on the New York Stock Exchange rose from $117 billion to $169 billion, mainly because of rising quotations. This would suggest that last year realized and unrealized capital gains on corporate securities added much more to the market value of individuals' assets during the year than did personal saving.

17. This procedure results in the omission of a small amount of additions to reserve of these associations which is included in personal saving as derived by the income-expenditure method.

18. The same data may also be readily rearranged in a third form, as a sources and uses of funds table for the private noncorporate group similar in form to that presented regularly for corporations. This simply requires grouping as uses the "gross investment" and "additions to financial assets" sections of table 4 in this article, and as sources the "depreciation" and "increase in debt" sections. Because of the treatment, indicated above, of life insurance companies, saving and loan associations, and savings banks, in the sources and uses table these financial intermediaries are viewed as being outside the group.

19. Loughlin F. McHugh and Bernard Beckler, "Residential Construction Activity and Financing," SURVEY OF CURRENT BUSINESS, December 1953, p. 18.

Table 4.—Composition of Gross and Net Personal Saving: Changes in Real and Financial Assets and Liabilities

[Billions of dollars]

Line	Item	1929–41	1942–45	1946–53	1929–53	1946	1947	1948	1949	1950	1951	1952	1953
1	**Net investment**	**4.9**	**−5.1**	**79.9**	**79.6**	**4.1**	**5.4**	**11.2**	**7.3**	**16.1**	**13.7**	**11.1**	**10.9**
2	**Gross investment**	**53.7**	**15.8**	**159.4**	**228.8**	**10.1**	**12.7**	**19.6**	**16.8**	**26.7**	**25.6**	**23.8**	**24.3**
3	**Plant and equipment**	**54.4**	**14.7**	**155.1**	**224.2**	**10.0**	**14.9**	**17.4**	**17.9**	**24.3**	**23.3**	**22.9**	**24.4**
4	Nonfarm dwellings	23.2	5.1	66.7	95.0	3.7	5.7	7.6	7.0	11.3	10.2	10.3	10.9
5	New construction by nonprofit institutions	3.1	.3	8.2	11.6	.4	.5	.8	1.1	1.3	1.4	1.3	1.4
6	New construction and producers' durable equipment, nonfarm unincorporated business	19.0	5.0	50.0	74.0	4.2	5.7	5.1	5.8	7.4	7.1	6.8	8.0
7	New construction and producers' durable equipment, farms	9.7	3.8	30.1	43.5	1.6	3.0	3.9	4.0	4.2	4.7	4.6	4.1
8	Net purchases of farms from corporations and financial institutions	−.5	.5	.1	.1	.0	.0	.0	.0	.0	.0	.0	.0
9	Increase in inventories of unincorporated business	−.7	1.1	4.3	4.6	.1	−2.2	2.1	−1.1	2.4	2.3	.8	−.1
10	Nonfarm	.1	1.0	4.3	5.4	.4	.1	1.0	−.2	1.5	.9	.2	.6
11	Farm	−.9	.1	.0	−.8	−.3	−2.3	1.1	−.9	.0	1.4	.6	−.7
12	Less: depreciation	48.8	20.9	79.5	149.2	6.0	7.2	8.4	9.5	10.0	11.3	12.7	13.3
13	Nonfarm dwellings and property of nonprofit institutions	22.0	7.9	21.4	51.3	2.1	2.2	2.3	2.5	2.7	3.0	3.2	3.5
14	Nonfarm unincorporated business	12.7	5.8	27.2	45.7	1.8	2.4	2.8	3.3	3.6	4.1	4.5	4.7
15	Farms	14.1	7.2	31.0	52.2	2.2	2.7	3.3	3.7	4.2	4.7	5.0	5.2
16	**Additions to financial assets less debt, and errors and omissions**	**32.6**	**131.5**	**22.5**	**186.6**	**8.5**	**−1.4**	**−1.2**	**.3**	**−4.0**	**4.0**	**7.3**	**9.1**
17	Additions to financial assets less debt	39.8	133.5	14.9	188.2	6.1	−1.0	−3.4	−1.2	−7.5	5.0	6.5	10.3
18	Additions to financial assets	42.5	126.8	104.2	273.5	15.4	10.2	6.6	6.9	11.2	14.8	19.3	19.7
19	Currency and bank deposits [1]	9.8	63.7	30.7	104.2	10.6	2.0	−1.8	−1.5	3.6	6.0	7.1	4.7
20	Saving and loan associations	−1.1	2.7	15.5	17.1	1.2	1.2	1.2	1.5	1.5	2.1	3.1	3.7
21	Private insurance	17.3	12.0	32.5	61.8	3.4	3.0	3.3	3.7	3.9	4.0	4.9	5.1
22	Government securities [1]	5.8	50.2	10.3	66.3	−.4	2.5	2.0	2.2	.8	−.5	.5	3.2
23	Corporate and other securities	10.6	−1.8	15.3	24.1	.6	.8	1.5	1.0	1.4	2.2	3.7	3.0
24	Increase in debt to corporations and financial intermediaries	2.7	−6.7	89.3	85.3	9.3	11.2	10.0	8.0	18.7	9.8	12.8	9.4
25	Consumer debt	2.6	−3.3	20.2	19.5	2.3	2.7	2.3	2.4	3.2	.5	3.8	2.8
26	Residential mortgage debt	1.8	−.2	43.1	44.8	3.6	4.5	4.8	3.9	7.2	6.5	6.3	6.7
27	Debt of nonfarm unincorporated business [1]	−.3	−1.8	20.6	18.5	3.0	3.3	2.3	1.2	7.2	1.5	2.1	.0
28	Farm debt [1]	−1.4	−1.4	5.4	2.6	.4	.7	.8	.6	1.1	1.2	.6	−.1
29	Errors and omissions	−7.2	−2.0	7.6	−1.6	2.3	−.4	2.2	1.4	3.4	−1.0	.9	−1.2
30	**Gross saving of persons and unincorporated business (2+16)**	**86.3**	**147.3**	**181.9**	**415.4**	**18.6**	**11.3**	**18.3**	**17.0**	**22.6**	**29.6**	**31.1**	**33.3**
31	**Personal saving (1+16)**	**37.5**	**126.4**	**102.4**	**266.3**	**12.6**	**4.0**	**10.0**	**7.6**	**12.1**	**17.7**	**18.4**	**20.0**

1. Additional detail is provided in the NATIONAL INCOME supplement.

NOTE.—In order to complete this table, estimates for 1929–32, not shown in the NATIONAL INCOME supplement, were prepared by methods similar to those followed in later years; and changes in financial assets and debt were taken from Irwin Friend, with the assistance of V. Natrella, *Individuals' Saving: Volume and Composition*. Estimates for "corporate and other securities" are quite unsatisfactory for that period.

SOURCE: U. S. Department of Commerce, Office of Business Economics.

Since capital gains or losses, whether or not they are realized, add to or subtract from the current value of an individual's asset holdings, it would not be surprising if gains tended to stimulate, and losses to reduce, consumer purchasing. If this were the case, in periods of large capital gains consumption would tend to be high and personal saving low relative to disposable income (which is measured exclusive of capital gains and losses), while in periods of large capital losses the opposite would be true. However, no such systematic tendency is discernible in the data for past years. If such a tendency exists at all, its effect is small in comparison either with the total value of capital gains or losses, or with personal consumption and saving.

Estimates of liquid asset holdings other than corporate securities and of individuals' debt, as defined in the Securities and Exchange Commission's estimates, are shown for selected dates in table 5. While revaluations of assets resulting from defaults or other causes affect these data too, their influence has been small, especially since 1941, and the differences between values at different dates correspond

closely to the value of net acquisitions of assets or net incurrence of debt for corresponding items as shown in table 4.

At the end of 1953 these liquid assets were valued at $328 billion, if assets of Government insurance funds (which correspond roughly to social insurance funds as previously defined, except for the omission of unemployment compensation funds) are omitted in order to bring the data into accord with the definition of the personal sector used in the national income statistics. This compares with $118 billion at the end of 1941 and $264 billion at the end of 1945. Inclusion of Government insurance, as in the Securities and Exchange Commission data, would bring the 1953 total to $380 billion, in addition to corporate securities. Mortgage and consumer debt to corporations and financial intermediaries had reached $80 billion by the end of 1953 from a figure of $17 billion at the end of World War II.

Saving and purchasing power

We shall try now to answer the question frequently put to us by business: Can I tap personal saving to increase my sales; is this saving readily available purchasing power?

The summary answer to the first part is a qualified "yes" and to the second part "no," but this answer is not very informative and certainly should not be viewed as discouraging

Table 5.—Liquid Assets Held by Individuals, Year End

[Billions of dollars]

	1929	1941	1945	1953
Liquid assets [1]	79.9	118.1	264.4	379.9
Other than Government insurance	78.4	108.9	238.6	328.3
Currency and bank deposits	43.6	53.3	117.2	147.9
Saving and loan associations	5.8	4.7	7.4	22.9
Private insurance	14.6	30.6	43.6	76.5
Government securities	14.5	20.3	70.4	81.0
Government insurance	1.5	9.2	25.8	51.6
Specified debt to corporations and financial intermediaries	16.0	20.4	17.0	79.9
Mortgage debt	11.4	13.2	13.1	55.8
Consumer debt	4.6	7.2	3.9	24.1

1. Does not include individuals' holdings of corporate securities.

Source: Securities and Exchange Commission.

to the seller. Again it is necessary to become somewhat technical, but we hope we can clearly show the interrelationships existing among consumer purchasing power, personal saving, and consumer spending. Futhermore, we want to stress that the considerable regularity of the saving does have sales and analytical significance.

An individual's maximum ability to spend for consumer goods and services in any time period is limited ultimately only by the sum of

(a) his income during the period,
(b) the value of his cash assets and other assets which can be converted into cash, and
(c) his ability to borrow or to buy on credit.

For individuals as a whole, the sum of this maximum "purchasing power" far exceeds a year's income, and this would be true even if the possibility of borrowing were to be excluded. Hence it would be hypothetically possible for personal consumption expenditures to bear a very irregular relationship to consumer income, and, indeed much to exceed income in any given time period.

Since total potential consumer purchasing power is much larger than income, the question as to how much of the large volume of personal saving in recent years—some $20 billion in 1953—really represents buying power which could be spent if consumers so desired, has rather limited meaning.

The question generally has reference to the role of either so-called "committed" saving or else of noncorporate investment.

"Committed" saving

Although there is no agreed definition of committed saving, it refers in a general way to saving which the saver either "must," or at least has an overriding incentive to, make regularly. Usually mentioned are insurance, pension funds, and debt repayment.

Aside from the fact that such commitments are not necessarily entirely firm, it should be recognized that insurance premiums or debt repayments may be met not only from current income but also by conversion of other assets or incurrence of other debt. More importantly, they may often or usually substitute for other forms of asset accumulation which would otherwise be made.

In considering the importance of "committed" saving, and debt repayments in particular, in the saving total, it must be further remembered that personal saving is the sum of positive saving by some consumers and negative saving by others, who are liquidating assets or incurring debt. In all postwar years more debt has been contracted than repaid.

Actually, saving in insurance and pension reserves plus repayments, which are largely contractual in character, on the principal of consumer instalment credit and residential mortgage debt alone amounted to about double the total amount of personal saving even in a year of such large saving as 1953. The magnitude of such "committed" saving is no indication of the amount of income which consumers are unable or unwilling to spend for consumption. Although it appears reasonable to suppose that such periodic payments—and other systematic forms of asset accumulation, such as the purchase of Government bonds through payroll deductions—may have some tendency to expand total saving, the amount cannot be measured and is certainly modest in relation to the size of "committed" saving.

Personal saving and investment

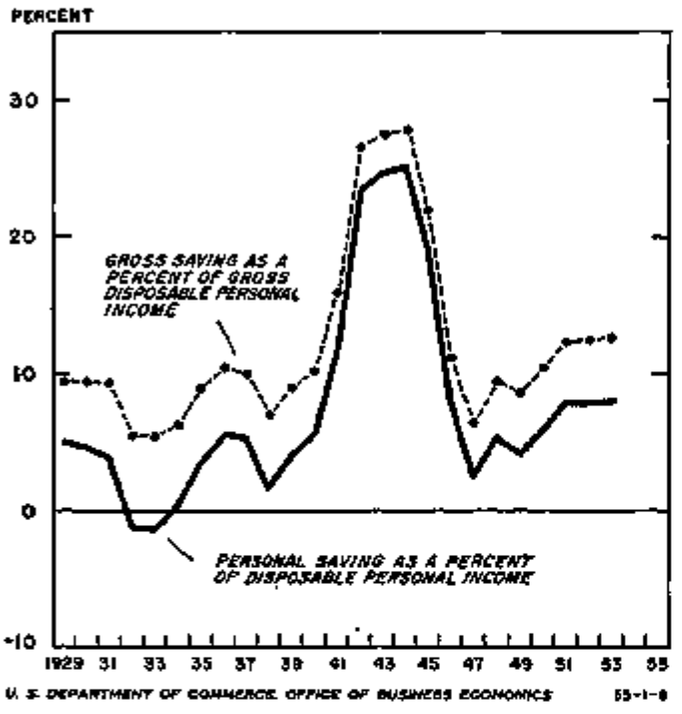
The desire to buy a house, purchase a farm or noncorporate business, acquire additional fixed assets for, or add to the inventory of, an existing business, or to pay off the debt on a house or business property, comprises one motive, among many, for personal saving, and to this extent may influence the aggregate amount of personal saving.

Actual investment in real assets, however, is quite distinct from saving and is unrelated to the saving process, which consists of spending less than income. For example, the purchase of a house for $10,000, with a $2,000 downpayment drawn upon a checking account and the incurrence of an $8,000 mortgage, has no effect at all upon the saving total which we report for the period. In table 4, it would result in an addition of $10,000 to one asset line, dwellings, canceled by a $2,000 reduction in another, currency and bank deposits, and an $8,000 increase in the mortgage debt line. Purchases of noncorporate business property are similarly without effect upon our personal saving total. As indicated above, however, this is not to say that the necessity of meeting periodic mortgage payments may not encourage saving by the home purchaser in the future.

In view of the foregoing we should not expect to find more correspondence, at least in the short run, between changes

in investment in the noncorporate sector and personal saving than results from the general tendency for most economic magnitudes to expand and contract together.

Examination of the data for the individual postwar years provided in table 4 indicates that, in actual fact, the correspondence between changes in saving and in investment by individuals has been, if anything, even less than this general consideration might suggest. In only three of the postwar years (1948, 1949, 1950) did net investment and personal saving even move in the same direction. From 1950 to 1953 net investment dropped by $5 billion while personal saving increased by $8 billion.



Thus neither *a priori* considerations nor the data for past years suggest that in periods when investment in houses and noncorporate business property is large, the rate of aggregate spending from income on consumer goods and services is low. In the short run, at least, investment in real assets and consumption do not appear as competitors for the consumer income dollar.[20]

It may be noted, in explanation of the data in table 4, that although personal saving usually exceeds investment in the noncorporate area, and thus provides funds to finance an excess of investment elsewhere in the economy, this was not the case in 1947, 1948, 1950, and perhaps 1949. In these years the personal sector instead drew upon others to help finance investment. This was possible because in 1947, 1948, and 1950 large Government surpluses on income and product account offset an excess of investment over saving in the private economy. In 1949, Governments were in a deficit position but a sharp drop in corporate investment while corporate saving was little changed created a temporary surplus of corporate saving over investment.

Changes in personal saving and its components

The discussions of "committed" saving and of noncorporate investment suggest that changes in most of the components of saving detailed in table 4 are likely to be dominated by switches in the forms of asset holdings, or by the contraction or repayment of debt with a simultaneous addition to or reduction in asset holdings. Examination of the detailed data indicates that none of them bears a stable relation to total personal saving. These considerations suggest that little insight into the behavior of total personal saving is to be obtained by considering these saving outlets separately, and attempting to reconstruct the course of the total from that of its parts.

This is, after all, to be expected. There are many motives for saving, and a single individual usually has several more or less clearly in mind. Building up a net worth position will ordinarily serve to help meet all or most of these objectives, almost irrespective of the form it may take, for the form can nearly always be altered without prohibitive difficulty or loss by purchase, sale, or conversion of, or borrowing against, assets. Such changes may be made not only to meet changing needs but also to take cognizance of changes in the relative advantages of different holdings with respect to such aspects as income, safety, and prospects for capital appreciation. Hence, it is not surprising that total personal saving is steadier than the flow of funds into and out of particular savings outlets.

Spending and income

The foregoing considerations suggest that more interesting and meaningful than the question of how much consumers *can* spend, and what the businessman really wants to know, is: What determines the amount consumers do in fact spend?

In practice, consumer expenditures—war periods aside—have moved in crude correspondence to (and except in the most extreme depression years been below) the disposable income of consumers. This has been so notwithstanding sharp changes in the amounts of debt repayment and other "committed" saving, in the amount of personal and noncorporate investment, in capital gains and losses, and in other variables which may be thought to affect the division of income between consumption and saving. It is entirely clear that by far the main factor governing the amount of consumer spending has been the size of disposable personal income.

This, and in particular the very close association of consumption with disposable personal income during the thirties, has encouraged efforts to derive formulas which would fully explain the values of personal consumption and personal saving by reference to the size of disposable personal income (measured in either current or constant dollars, and on either an aggregate or per capita basis), to its amount as compared with past periods, and to other factors, such as the size of liquid asset holdings, which may influence spending and saving.[21]

However, while except during the war period the movements of consumption and income have been in rough correspondence, during the postwar period the correspondence between the movements of personal income and of the much smaller and more sensitive personal saving series has

20. It is probable that an exception should be made for the rather special case of involuntary inventory accumulation on the part of unincorporated firms, which may create a "frozen" asset which it would be difficult to use as security for credit extension, and perhaps also to some extent for changes in farm inventories—insofar as farmers may consider their income to consist of cash receipts less expenditures.

21. Some of these formulas, and uncertainties associated with their application in the postwar years, are discussed in "Personal Saving in the Postwar Period," by Irwin Friend, SURVEY OF CURRENT BUSINESS, September 1948. That source also provides additional analysis of certain other points discussed in the present article.

not been close. Despite much ingenious and illuminating research a formula, embodying and giving the proper weight to the principal determinants of personal saving, which can be applied with confidence in the postwar period seems not to have been established.

In particular, the reason for the much higher personal saving rate in the 1951–54 period than in 1948–50 is uncertain—as is the reason that it has combined with other changes in such a way as to hold the ratio of total private saving to gross national product nearly constant, as pointed out earlier.

Need for information by saver groups

If, as suggested, an individual's total saving is likely to be more regular than changes in his holdings of individual types of assets or of liabilities, further insight into the determinants of saving and the saving process would probably be afforded by a classification of total personal saving by significant groups among the population. Unfortunately, data presently available provide no basis for the preparation of such statistics.

Possibly the most useful single classification would divide consumer units among those primarily dependent for income upon farming, nonfarm entrepreneurial income, other forms of property income, and wages and salaries, respectively, together with a cross-classification by size of family income—although many other characteristics of the population may also be related to saving patterns.

Occasional surveys of family spending and saving have provided a considerable body of knowledge concerning differentials in the rate of saving among different groups in the population in individual years. However, for such a breakdown to add appreciably to understanding of changes in total personal saving over time, it will be necessary to secure statistics, for groups within the population, which are of considerable accuracy, consistent with the national income statistics, and extend over a period of years.

On the basis of what is now known it is difficult to appraise in a definitive way the possibility that the rate of personal saving in recent years has been unusually high and hence likely to be reduced, as has been suggested on the basis of prewar relationships, or the prospects for stimulating total consumption at the expense of personal saving.

But whether saving is somewhat high or "in accordance with expectations," either answer would in no way provide a deterrent to stimulating sales through the offering of new and better products, greater values, and intensive sales efforts. The main condition for a strong consumer market, in addition to effective merchandising, is a high and rising rate of disposable personal income.

NEW OR REVISED STATISTICAL SERIES

Farm Income and Marketings: Revised Data for Page S–2 [1]

Year and month	Cash receipts from farming							Indexes, unadjusted					
		Receipts from marketings and CCC loans						Receipts from marketings and CCC loans			Physical volume of farm marketings		
	Total, including Government payments	Total	Crops	Livestock and products				Total	Crops	Livestock and products	Total	Crops	Livestock and products
				Total	Dairy products	Meat animals	Poultry and eggs						
	Millions of dollars							1935–39=100					
1952: January	2,842	2,810	1,088	1,531	342	920	269	285	384	403	143	139	151
February	2,074	2,041	038	1,403	327	824	234	306	325	309	116	89	142
March	3,102	2,058	023	1,435	309	794	254	311	320	378	118	76	149
April	2,109	2,061	571	1,490	393	625	259	311	302	322	117	67	154
May	2,205	2,171	626	1,545	427	611	264	328	221	407	126	79	161
June	2,360	2,340	862	1,478	439	756	254	353	305	389	137	110	156
July	2,755	2,741	1,245	1,496	419	776	272	414	440	394	158	169	150
August	2,946	2,938	1,410	1,528	401	810	300	443	496	402	163	181	150
September	3,545	3,537	1,896	1,641	373	934	317	534	670	432	187	220	162
October	4,106	4,092	2,286	1,804	369	1,072	359	617	809	475	215	265	184
November	3,735	3,721	1,900	1,821	356	889	376	566	585	427	172	172	173
December	2,880	2,874	1,401	1,473	351	762	336	434	496	358	168	171	166
Monthly average	2,747	2,734	1,187	1,537	381	846	288	411	490	405	162	143	158
1953: January	2,784	2,769	1,388	1,424	342	783	278	416	472	375	165	178	155
February	1,943	1,927	647	1,280	323	682	262	291	229	337	118	88	140
March	2,100	2,078	687	1,388	353	707	304	313	243	365	126	89	154
April	2,019	1,982	572	1,410	370	702	308	299	202	371	124	77	160
May	2,113	2,079	598	1,481	419	705	316	314	211	390	131	81	168
June	2,263	2,247	813	1,434	413	661	290	334	287	370	145	117	168
July	2,437	2,423	1,036	1,387	392	673	300	366	396	365	154	161	157
August	2,564	2,556	1,136	1,420	375	716	314	396	401	374	161	161	162
September	3,222	3,217	1,742	1,475	348	780	330	485	616	388	180	217	168
October	3,888	3,881	2,309	1,572	349	842	364	565	815	414	223	286	186
November	3,374	3,370	1,812	1,559	338	836	371	508	640	410	195	213	185
December	2,939	2,927	1,466	1,461	348	763	334	442	518	388	173	183	166
Monthly average	2,638	2,618	1,179	1,439	364	738	312	395	417	379	159	153	164

[1] Compiled by the *U. S. Department of Agriculture, Agricultural Marketing Service*. Data have been revised to incorporate more complete information.